

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1, 4, 6, 7, 11, 12, 14, 16, 25-28, and 30-31 are pending in this application and claim 32 is new. Claim 1 is independent. The remaining claims depend, directly or indirectly, from claim 1.

Claim Amendments

Claim 1 has been amended in this reply to incorporate the limitations recited in claim 2. Therefore, claim 2 has been canceled. Further, claim 14 has been amended to correct antecedent basis, claim 25 has been amended to correctly depend from claim 1, and claim 32 has been added to clarify the present invention. No new matter has been added by this reply, as support for the amendments may be found, for example, within the specification on page 12, line 26 or in Figure 5-7 of the originally filed application.

Claim Rejections under 35 U.S.C. § 102

Rejection of Claims 1-2, 4, 6-7, 11, 25-28, and 30

Claims 1-2, 4, 6-7, 11, 25-28, and 30 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 3,491,788 ("Kilayko"). Independent claim 1 has been amended in this reply. To the extent that this rejection applies to claim 1 as amended, this rejection is respectively traversed.

Claim 1 recites a control valve for feeding a cleaning fluid to at least one nozzle opening of a nozzle. The valve comprises at least two outlets that are couplable with the at least one nozzle opening, an inlet that is couplable with a feed pump for the cleaning fluid, and a valve body influencing at least two paths of the cleaning fluid from the inlet to the at least two outlets. A first outlet in fluid communication with the inlet creates a first path of the cleaning fluid from the inlet to the first outlet, and a second outlet in fluid communication with the inlet creates a second path of the cleaning fluid from the inlet to the second outlet. The valve body is controlled by the pressure of the cleaning fluid such that the valve body can be disposed in at least two valve positions and determines, without involvement of an additional valve body, through which path of the first path, the second path, and combination thereof the cleaning fluid flows. At a first valve position, the valve body allows the cleaning fluid to flow through the first path, at a second valve position, the valve body blocks the first path such that the cleaning fluid substantially does not flow through the first path, while allowing the cleaning fluid to flow through the second path, and the valve body is constructed *as a slide element*.

Kilayko, in particular, shows in Figures 2 and 3 a valve body **10** having a pair of openings **12, 14** and a flow channel **16** extending therebetween. Two cavities **18, 20** are aligned along the flow channel **16**, and a vent **22** extends out through the side of the valve body **10** and communicates with one of the cavities **18, 20**. Ball check valves **24, 26** are then provided within the cavities **18, 20**, in which the ball check valves **24, 26** are responsive to pressure. Under conventional operation, the ball check valve **24** will seal the vent **22**, in which fluid will travel through the flow channel **16**, past the ball check valve **26** and out the opening **14**. Then, if prime is lost, the ball check valve **24** will instead seal the opening **12** and open the vent **22**, while ball check valve **26** simultaneously opening **14**.

However, Applicant respectfully asserts that Kilayko fails to teach all of the elements of amended independent claim 1. Specifically, claim 1 additionally requires the valve body to be constructed *as a slide element*. For example, as shown in Figure 5 of the present application, at a low pressure, the cleaning fluid flows from the inlet 24 through the first outlet 26 (referred to as path A). Then, at a higher pressure, the slide element 70 moves toward the left against the spring 52, and the cleaning fluid flows from the inlet 24 through the second outlet 28 (referred to as path B), while path A is blocked by the slide element 70. That is, as the pressure of the cleaning fluid changes, the slide element 70 decides through which of paths A and B the cleaning fluid may flow.

Kilayko, though, does not disclose, suggest, or teach having a slide element for the valve body or valve elements. Rather, as shown in Figures 2 and 3 and discussed above, Kilayko discloses using the ball check valves 24, 26 when sealing between the different passages of the valve 10. Thus, Kilayko fails to show or suggest the slide element of the present application and as required by independent claim 1.

Applicant respectfully notes that in order for a claim to be anticipated, “every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim.” *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). In view of the above, Kilayko fails to teach each limitation recited in independent claim 1, as amended, as required to support a rejection under § 102. Thus, independent claim 1 is patentable over Kilayko. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claims 1, 12, 14, and 31

Claims 1, 12, 14, and 31 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 2,254,990 ("Blank"). Independent claim 1 has been amended in this reply. To the extent that this rejection applies to claim 1 as amended, this rejection is respectively traversed.

As discussed above, independent claim 1 has been amended to incorporate all of the limitations previously recited in dependent claim 2. Because dependent claim 2 is not rejected and is patentable over Blank, independent claim 1 is now patentable over blank. Accordingly, withdrawal of this rejection is respectfully requested.

Patentability of Claim 32

Claim 32 has been added by way of this reply. Claim 32 recites that the slide element comprises a first piston section and a second piston section, in which the first piston section and the second piston section are different sizes. For example, as described in line 26 on page 12 and shown in Figures 5-7 of the present application, the valve body 70 may be constructed as a piston slide element with two different-sized piston sections 72 and 74. The diameters of the piston sections 72 and 74 may be designed such that when a threshold pressure is reached, the slide element 70 may displace against the spring element 52 to close the outlet 26 and open the outlet 28.

Applicant respectfully asserts that both Kilayko and Blank fail to disclose a slide element having piston sections with different sizes. Specifically, as described above, Kilayko fails to describe the use of a slide element or any object resembling a slide element, and the slide element recited within claim 2 is patentable over Blank. Thus, Kilayko and Blank fail to show a slide element, much less a slide element having piston sections with different sizes, as required

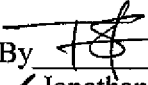
by claim 32 of the present application. Accordingly, claim 32 is patentable over Kilayko and Blank.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 17102/013001).

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Respectfully submitted,

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